

**~~SYSTEM AND METHOD OF PHASE-LOCKING A TRANSMIT CLOCK
SIGNAL PHASE WITH A RECEIVE CLOCK SIGNAL PHASE~~**

ABSTRACT OF THE DISCLOSURE

Systems and methods for synchronizing a receive clock signal phase with a transmit clock signal phase are presented. A system includes a receiving channel and a transmitting channel, wherein the transmitting channel synchronizes a transmit clock signal phase with a receive clock signal phase based on receive clock signal phase data. A method includes storing a previous receive clock signal phase of a receiving channel and identifying a current receive clock signal phase of the receiving channel. The method further includes determining a phase difference between the previous receive clock signal phase and the current receive clock signal phase, and identifying a direction of the phase difference ~~between the previous receive clock signal phase and the current receive clock signal phase~~. The method further includes adjusting a previous transmit clock signal phase of the transmitting channel to a current transmit clock signal phase of the transmitting channel based on the phase difference and direction.